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54

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,372	07/23/2003	Eric Eichelberger	30048CIP1A	1233
7590	09/29/2004			EXAMINER
Langlotz Patent Works, Inc. PO Box 759 Genoa, NV 89411				HASAN, MOHAMMED A
			ART UNIT	PAPER NUMBER
				2873

DATE MAILED: 09/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/626,372	EICHELBERGER ET AL.
	Examiner	Art Unit
	Mohammed Hasan	2873

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1 - 23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) 1 - 8 is/are allowed.
- 6) Claim(s) 9,12 - 17, 18 is/are rejected.
- 7) Claim(s) 10, 11, 19 - 23 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 23 July 2003 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/23/2003.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

Oath/Declaration

1. Oath and declaration filed on 7/23/2003 is accepted.

Information Disclosure Statement

2. The prior art documents submitted by applicant in the Information Disclosure Statement filed on 7/23/2003 have all been considered and made of record (note the attached copy of form PTO – 1449).

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 9, 12 – 18 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 – 7 of U.S. Patent No. 6,614,969 in view of Marian, Jr (6,659,955 B1).

Regarding claim 9, Eichelberger et al discloses the claimed limitations, as recited in claim 1 invention (column 5, lines 25 – 33). Claim 1 discloses a medical system comprising: a base unit including an electronic display, a remote imaging transducer connected to the display unit via a flexiable cable, the cable including a plurality of signal transmission lines and each signal transmission line including a pair of conductors coupled for low voltage differential signal transmission. Eichelberger discloses all of the claimed limitations except high speed conductors. Marian, Jr discloses (refer to figure 3) coaxial conductors 210 (i.e., high speed conductors column 7, lines 15 – 25)(column 8, line 19).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide coaxial conductors in to the Eichelberger medical imaging system for the purpose of less costly imaging system with a limited number of processing channels as taught by Marian , Jr (column 7, lines 45 – 47).

Regarding claim 12 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 2 of U.S. Patent No. 6,614,969. Claim 2 discloses, wherein the cable includes an optically transmissive element connected at one end to an illuminator, and operable to transmit light to a subject imaged by the transducer.

Regarding claim 13 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 3 of U.S. Patent No. 6,614,969. Claim 3 discloses, wherein each of the twisted pairs is wrapped about the optically transmissive element.

Regarding claim 14 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 4 of U.S. Patent No. 6,614,969. Claim 4 discloses, wherein the transducer is a photosensitive electronic device.

Regarding claim 15 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 5 of U.S. Patent No. 6,614,969. Claim 5 discloses, wherein the photosensitive electronic device is a CCD.

Regarding claim 16 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 6 of U.S. Patent No. 6,614,969. Claim 6 discloses, wherein the transducer is an ultrasound element.

Regarding claim 17 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 7 of U.S. Patent No. 6,614,969. Claim 7 discloses, wherein the conductors of each twisted pair are of a common wire gauge, and are each helically wound about each other.

Claim 18 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 8 of U.S. Patent No. 6,614,969 in view of Marian, Jr (6,659,955 B1).

Regarding claim 18, Eichelberger et al discloses the claimed limitations, as recited in claim 8 invention (column 5, lines 25 – 33). Claim 8 discloses a medical system comprising: a base unit including an electronic display, a remote imaging transducer connected to the display unit via a flexible cable, the cable including a plurality of signal transmission lines and each signal transmission line including a pair of conductors coupled for low voltage differential signal transmission. Eichelberger discloses all of the claimed limitations except high speed conductors. Marian, Jr discloses (refer to figure 3) coaxial conductors 210 (i.e., high speed conductors column 7, lines 15 – 25)(column 8, line 19).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide coaxial conductors in to the Eichelberger medical imaging system for the purpose of less costly imaging system with a limited number of processing channels as taught by Marian, Jr (column 7, lines 45 – 47).

Allowable Subject Matter

4. Claims 1 – 8 are allowed.
5. The following is an examiner's statement of reasons for allowance: The prior art taken either singularly or in a combination fails to anticipate or fairly suggest the limitations of the independent claims, in such a manner that a rejection under 35 U.S.C. 102 or 103 would be proper. The prior art fails to teach a combination of all the claimed features as presented in independent claim 1, for example which include a medical

imaging system having the cable including a plurality of signal transmission lines and each signal transmission line including a twisted pair of conductors and each conductor connected at a first end of transducer and at a second end to the base.

6. Claim 10, 11, and 19 – 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter: The prior art fails to show transmitting at a data rate of at least 100Mbits per second and transmission lines are twisted pairs.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammed Hasan whose telephone number is (571) 272-2331. The examiner can normally be reached on M-TH, 7:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on (571) 272- 2328. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MH
September 11, 2004



Georgia Epps
Supervisory Patent Examiner
Technology Center 2800